

APPENDIX A. ISSUES, QUESTIONS AND CONCERNS FROM PUBLIC MEETINGS

At each of the public meetings (Table 1), representatives from the Division of Entomology and Plant Pathology presented the proposed gypsy moth project, and answered and received questions and comments. The presentation explained:

- the life cycle, feeding habits and hosts of gypsy moth,
- the identification of gypsy moth,
- survey methods,
- gypsy moth impacts and damage to the trees and forest,
- selection of proposed sites,
- selection of the treatment options,
- the timing and application of treatments,
- boundaries of the treatment sites with maps and photos.

Following the presentation and during the presentation, questions and comments were taken, answered and discussed with the people attending the meetings. Representatives of the Division of Forestry and Purdue University also attended the meetings and assisted in answering and discussing questions and comments from the people attending the meetings.

The questions and comments received at the public meetings concerned four issues;

- Human health and safety;
- Nontarget effects and environmental effects;
- Economic and political impacts;
- Likelihood of success of the proposed project and the treatment options proposed.

The public meetings did not develop any additional issues. Other questions received at the public meetings asked about gypsy moth biology, what the public can do to address gypsy moth on their property, and other insects.

ISSUES

Human health and safety

The questions and comments received at the public meeting regarding human health and safety were in three areas:

- The use and risk of Btk;
- The use and risk of pheromone flakes in mating disruption;
- The decision and notification process for the implementation of the project; and
- The method and time of application of Btk and pheromone flakes

Btk questions concerned the risk to humans, how long it has been used, and how long it persists in the environment. The responses explained that Btk is a naturally occurring soil bacterium, that minor eye or nasal irritation may occur in a few people, that treatments are halted when children or school buses are present and that no hazard has been identified for the general public exposed to Btk.

Mating disruption questions concerned risk to humans and how long it persists in the environment. The responses explained how the pheromone flakes worked and that there is no risk from the pheromone or glue used with the flakes.

Notification questions concerned how the people in the sites would be notified when the decision to do, or not do, the project would be made and how they would be notified of actual treatment if the project were conducted. The responses to decision making explained the process to select sites, determine the treatment alternative, and involve the public through public meetings and comments. The responses also explained when the decision to do, or not do, the project would be made. The response to notification explained that the public would be notified by direct mail and through public notice and news release of the decision. The responses explained how people would be notified when the treatment is applied.

The responses to method of application explained that all application is done by aircraft flying 50-100 feet above tree tops, that the application of Btk is done once or twice and occurs in late April through late May with each application starting shortly after dawn continuing until done or until winds exceed 10-15 mph, and the application of pheromone flakes is done once and occurs in mid June to early July with the application starting shortly after dawn and continuing through the day.

Nontarget and environmental effects

For the use of Btk, nontarget questions inquired about Btk effects on bees, wildlife, plants and predators and parasites. .

For the risk to nontargets, the responses explained that Btk would have no affect on bees, wildlife, plants or other nontarget organisms. But Btk would have an affect on other caterpillars of butterfly and moths.

For the use of pheromone flakes, nontarget questions inquired about effects on other moths, insects, and organisms. The responses explained that the pheromone in the flakes only affects gypsy moth.

The questions on environmental effects of Btk asked about the fate of Btk in the soil and how long Btk persists. The responses explained that applications of Btk formulations do not increase levels of Btk in soil and that it persists for a relatively short time in the environment.

The questions on environmental effects of pheromone flakes asked how long they last, how long they persist in the environment, if the gypsy moth trap draws gypsy moth into the state and the affect of gypsy moth defoliation on trees.

The responses explained that the flake emits pheromone for 12-16 weeks, that the flake may take 10-15 years to biodegrade and that the gypsy moth trap only catches males and does not draw gypsy moth into the state.

During the response to nontarget and environmental questions, the response explained that direct application of Btk and pheromone flakes to water is avoided.

The response explained the impact of gypsy moth defoliation on single trees and forests. The response also explained the public nuisance impact of gypsy moth on the urban environment.

Economic and political impacts

People asked about the cost of the treatment, the gypsy moth quarantine, and what other states are doing about gypsy moth.

The response stated that the treatment cost is approximately \$30.00 per acre for Btk or pheromone flakes and that the cost is shared between the USDA-Forest Service and the Indiana Department of Natural Resources.

Regarding the quarantine, the response explained that compliance programs are available for industries to use to meet the requirements of the quarantine that will allow them to ship or move their products outside the quarantine area. They were also informed of the penalties for non-compliance with the quarantine and that homeowners can self-inspect or have a certified pesticide applicator do the inspection of outdoor household articles if they are making a household move.

Regarding what other states are doing, the response explained the gypsy moth status in Michigan, that Michigan is considered generally infested and that Michigan chose to follow a suppression approach to managing gypsy moth.

During the public meeting for the Kendallville and Middlebury sites, the discussion and comment of the people attending the meeting lead to a vote in support of the project.

Likelihood of success

The questions received were determining treatment success using traps, how often areas would have to be treated, how homeowners can help control gypsy moth, when gypsy moth would be established in the area, how effective is each treatment, how effective are natural enemies of gypsy moth, what other chemicals can be used and if DNR had the manpower to be effective.

The responses explained how traps are placed on intensive grids after treatment and the number of moths caught indicates success. It was explained that treatment success would be determined the same year of treatment for Btk, but it would be 2005 before the pheromone flake success could be determined.

The response to how often to treat areas explained for Indiana's gypsy moth management program, sites are treated once and not usually treated the following year unless weather conditions cause the treatment to fail.

The response to when gypsy moth would be established explained that gypsy moth could be established in the treatment areas in 5-15 years depending on treatment success, natural and artificial movement of gypsy moth and other factors.

The response to effectiveness explained that success is directly linked to what we know about the gypsy moth population in terms of density, area it occupies, and host availability. To be effective the treatment has to be carefully selected and applied properly and at the right time. Examples of past use of pheromone flakes and Btk were given to explain effectiveness.

Regarding natural enemy effectiveness, it was explained they are not present in isolated infestations and have no role in achieving success. However in generally infested areas, natural enemies have a role in managing gypsy moth.

Regarding other chemicals, the response explained that other chemicals are labeled for gypsy moth but they may be more harmful to non-targets in large projects and are not available under federal gypsy moth management programs.

In response to manpower, currently there is enough to maintain the program, but future gypsy moth conditions may be beyond the current manpower availability.

OTHER QUESTIONS AND CONCERNS

People asked what people can do if they have gypsy moth, about trapping and survey methods, who comes to check out their trees, about the gypsy moth biology and about other insects.

The response to what they can do explained that people can call the IDNR to let us know if they have gypsy moth, they can destroy eggmasses, or they could use barriers to prevent caterpillars from moving up the tree. Two people described possible infestations on their property outside the treatment areas that will be investigated.

The response for trapping and survey methods explained how traps are set and moths counted. The response also explained that people using traps are discouraged because the data from their trap would not be available to the IDNR to use in the analysis of the trapping survey.

The response for checking trees for gypsy moth explained that the IDNR would send an employee to examine trees suspected of having gypsy moth.

Table 1: Date and time of Public Meeting(s) for the proposed treatment sites by county.

COUNTY	SITE	DATE	TIME
Allen	Northwest Allen & Pine Valley & Parkview & Arcola	February 26, 2004	10:00 – 11:00 AM 12:00 – 1:00 PM 2:00 – 3:00 PM
		February 27, 2004	10:00 – 11:00 AM
DeKalb	South West DeKalb & County Line (Allen Co)	February 24, 2004	2:00 – 3:00 PM
Elkhart	Elkhart & Middlebury	February 17, 2004	9:30 – 10:30 AM
	Elkhart & Middlebury & County Rd 1	February 20, 2004	2:00 – 3:00 PM
Kosciusko	Lake Wawasee	February 19, 2004	2:00 – 3:00 PM
LaGrange	Cass Lake	February 23, 2004	10:00 – 11:00 AM
Lake	Brookwood	February 16, 2004	9:00 – 10:00 AM
LaPorte	Pinhook Bog	February 17, 2004	1:00 – 2:00 PM
	Springville	February 18, 2004	9:00 – 10:00 AM
Marshall	Juniper Rd 04	February 20, 2004	9:30 – 10:30 AM
Noble	Kendallville	February 23, 2004	2:00 – 3:00 PM
	Big Lake & Merriam Chapel	February 24, 2004	10:00 – 11:00 PM
Porter	Cobbs Corner	February 18, 2004	1:00 – 2:00 PM
	Crisman	February 16, 2004	1:00 – 2:00 PM
St. Joseph	South Bend West	February 19, 2004	9:30 – 10:30 AM
Scott	Crothersville	March 11, 2004	9:30 – 11:15 AM
Whitley	South East Noble & Blue Lake & Walnut Corners & Churubusco & McDuffee (Allen Co.)	February 25, 2005	11:00 AM – 12:00 PM 2:00 – 3:00 PM